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INFORMATION LITERACY EDUCATION IN THE UK

Reflections on perspectives and practical approaches of
curricular integration

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ABSTRACT

This paper has two main aims: to present the current position of information literacy education (ILE) in UK-based academic institutions, and to propose a strategy that ensures the integration of ILE in learning and teaching practices. The first part of the paper offers an insight into the perceptions of information literacy by exploring four distinct perspectives: those of the institution, the faculty, the library staff, and the students. From an institutional perspective, information literacy is dominated by the need to measure information skills within the context of information as a discipline in its own right. Also, there is a great deal of misinformation regarding information literacy, and as a result, a clear marketing strategy must be adopted by information professionals to address the misconceptions held by faculty staff and students alike. This article aims to address these points by drawing on recent scholarship and research in the field, which demonstrates the validity of information literacy as a process for fostering independent learning. The second part of the paper explains how a fellowship project has placed information literacy on the pedagogical agenda of the University of Staffordshire in the UK by promoting information literacy education as an integrated element of the curriculum.

INTRODUCTION

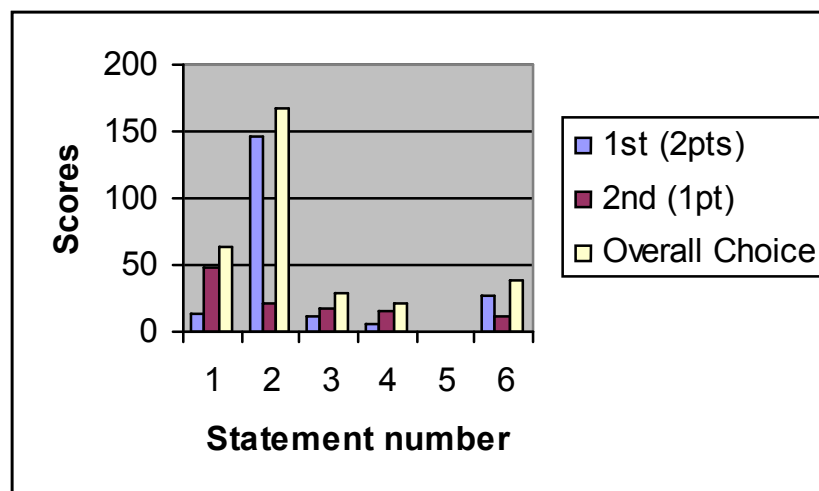
The paper is divided into two parts. The first part examines the findings generated by a workshop run during the conference *Information Literacy: recognising the need*¹, organized by Staffordshire University in May 2006, and presents further analysis of these findings during a subsequent seminar in November 2006. The need to match institutional learning and teaching policy with practice is examined, and the authors aim to demonstrate that by embedding information literacy provision, the ground is prepared for the implementation of a range of approaches in line with the Six Frames of Information Literacy promoted by Bruce, Edwards, and Lupton (2006). Participants from both events are well placed to comment on information literacy education in higher education, because they represent a mixture of staff who are involved in information literacy provision, from library and information science (LIS) faculties as well as academic libraries, from a number of universities in the UK. The paper concludes by proposing a successful advocacy strategy employed at Staffordshire University to integrate information literacy education in its learning and teaching policy. This part of the paper examines the integration of information

literacy in the curricula of the Staffordshire University Business School, thus offering a useful frame of reference for educators who are embarking on similar endeavors. The readership of this paper extends beyond the UK, as the paper focuses on issues that cross national boundaries, such as the need to market information literacy education to faculty and students, and to integrate it within subject-specific curricula.

PART ONE: REFLECTION ON THE FINDINGS FROM THE MAY AND NOVEMBER EVENTS

The May workshop aimed to identify the conceptions of information literacy held by the participants of the Staffordshire conference; to give an overview of information literacy education in the UK; and to develop a picture of the information literacy's perspectives held by higher education institutions, colleagues (working in faculties and libraries), and students. Posters displayed lists of statements that described information literacy from these four perspectives. The participants were asked to choose two options per poster and to rank these as first or second choice, according to the level of importance they allocated to each selection. The data from each poster is displayed in the charts below, together with the relevant

CHART 1: INSTITUTIONAL PERSPECTIVES OF INFORMATION LITERACY BASED ON THE *SIX FRAMES FOR INFORMATION LITERACY EDUCATION* (BRUCE, EDWARDS, & LUPTON, 2006)



POSTER 1: STATEMENTS ILLUSTRATING THE SIX FRAMES OF INFORMATION LITERACY

1. Information literacy is knowledge about the world of information (*Content* frame)
2. Information literacy is a set of competencies or skills (*Competency* frame)
3. Information literacy is a way of learning (*Learn-to-learn* frame)
4. Information literacy is a personalised investigation of a subject and is different for different people/groups (*Personal relevance* frame)
5. Information literacy is viewed within a social context (*Social impact* frame)
6. Information literacy is a complex of different ways of interacting with information (*Relational* frame)

list of statements. These lists were drawn primarily from two sources. The first poster displayed statements drawn from the Six Frames of Information Literacy devised by Bruce, Edwards and Lupton (2006), and aimed to elicit the participants' view of information literacy education (ILE) from an institutional perspective. An account of this work is given elsewhere (Andretta, 2007, and in press); here it suffices to say that these diverse approaches set the analytical framework used to analyze the data from this poster. The statements found in posters 2, 3, and 4 originated from the first author's information literacy practice.

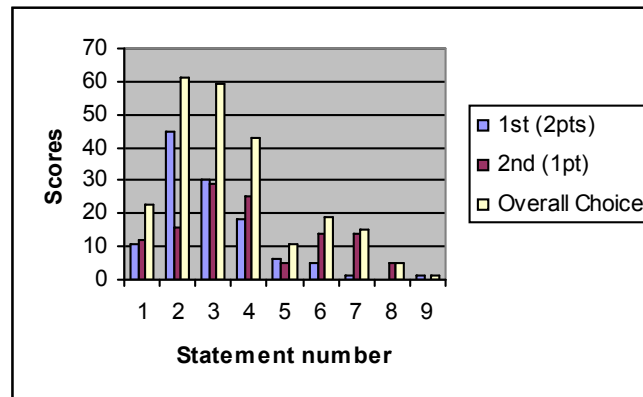
In poster 1 the second statement, which portrays information literacy as a set of competencies, is the most popular first choice, indicating an institutional emphasis on the development of information skills due to the level of measurability of this strategy. In addition, this statement and statement 1 are the most popular second choices, suggesting that in the main, information literacy operates as a discipline in its own right (statement 1) as well as an information-skills-development strategy (statement 2)—what Bruce, Edwards, and Lupton (2006) refer to as the *content* and *competency* frames, respectively. It also demonstrates the influence of the Society of College, National and University Libraries (SCONUL)'s "Seven Pillars" model (1999) in shaping UK librarians' views of information literacy as a set of skills. The participants at the November workshop attributed the predominance of statements 1 and 2 to the institutions' need to measure students' academic achievement and prove accountability in terms of Higher Education Funding Council for England (HEFCE)² funding. Statements 3, 4,

and 6 also attract a number of second options, illustrating some support for information literacy as a way of learning, emphasizing personal relevance, or focusing on the learner-information interaction. This validates the claim by Bruce, Edwards, and Lupton (2006) that information literacy education normally consists of a combination of strategies (or frames). Some members of the November event also commented that if this activity had involved senior management (operating at institutional policy level), the outcome would have shown a preference for statements 5 and 6, as these reflect the aims of many institutional missions where information literacy is viewed as a social enabler (*social impact* frame) and as complex or different ways of interacting with information (*relational* frame). The responses illustrate that the mission has not permeated the practice at ground level. Is this because of the librarians' traditional role as custodians of information resources, rather than as full-fledged educators? The emergence of students and users as producers as well as consumers of information (Lorenzo & Dziuban, 2006; Whitworth, 2006; Walton, Barker, Hepworth, & Stephens, 2007) compounds the challenge of expanding information professionals' portfolios by requiring librarians to take on (reluctantly, in some cases) the role of information literacy educators (Stubbings & Franklin, 2006; Andretta, 2006).

The lack of selection of statement 5 by the conference's participants also demonstrates a lack of engagement with information literacy within a wider social context. As Andretta (2007) argues, this omission:

... raises concerns over the discrepancy

CHART 2: LIBRARY STAFF'S PERSPECTIVES OF INFORMATION LITERACY



that exists between the international perspective on information literacy, which emphasises its social and lifelong learning roles, and the dominant perception of this phenomenon within the UK, where the measurable and quantifiable information skills and knowledge are prioritised. (Andretta, 2007, pp. 8–9)

The participants' preference for the competency and content frames at the expenses of the other approaches also goes against Bruce, Edwards, and Lupton's original intention of delivering information literacy education based on a combination of, if not all of, the six information literacy frames.

Some participants at the May event felt that a seventh statement, "Information literacy is not

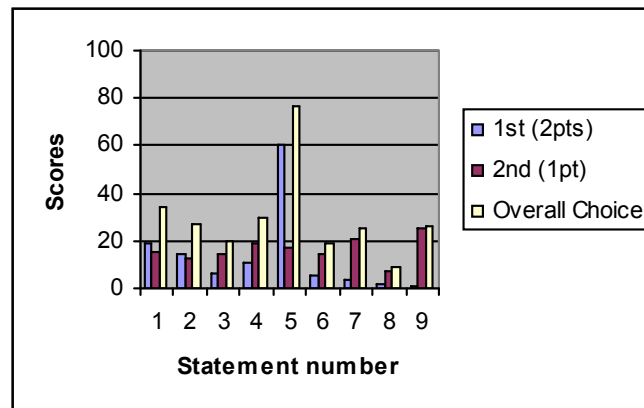
employed as part of the institutional learning and teaching strategy," needed to be added to the list in poster 1 in order to take into account an institutional lack of engagement with information literacy education.³ Had this option been available, perhaps a cluster of "don't know" responses would have emerged, raising the need to market information literacy at the senior institutional level.

Statement 2 is the most popular first choice in poster 2, as it offers a widely acknowledged interpretation of information literacy that contains the main elements of information processing identified by two major frameworks (Association of College & Research Libraries, 2000; Bundy, 2004). Statement 2 also describes the role of information provider, which is a role traditionally associated with librarians'

POSTER 2: STATEMENTS ILLUSTRATING LIBRARY STAFF'S PERSPECTIVES OF INFORMATION LITERACY

1. Empowering students to become lifelong learners
2. An awareness of the need for information, how to find it, evaluate it for relevance, use it appropriately and add to the pool of information available to others
3. Extremely vital research skills for both undergraduate and postgraduate students as it enables the investigation of any subject. Indeed many lecturers would benefit from these skills too!
4. The ability to know when to look for information, how to find it, analyse it, use it ethically
5. A means of passing on sophisticated research skills to students and staff. A core element of the library's mission
6. Information skills
7. Some of them don't regard it as their 'job' or 'role' to encourage learning among the students or facilitate independent/continuous learning
8. Great deal of jargon and very few clear definitions
9. I am not sure about library staff

CHART 3: FACULTY'S PERSPECTIVES OF INFORMATION LITERACY



professional practice. Participants at the November event interpreted the preference for statements 2 (first choice) and 3 (second choice) as an illustration of the adoption of the SCONUL model of information literacy. Once again, the emphasis on skills, promoted particularly by statement 3, confirms the staff's preference for capabilities that can be measured. In contrast, the less popular statement 1 emphasizes information literacy as an empowering lifelong learning attitude, which the November participants felt was very difficult to assess. It also demonstrates the librarians' adherence to traditional behaviorist views of teaching and learning, at the expenses of constructivist approaches such as problem-solving and reflective learning.

As a second choice, information literacy is

interpreted in a variety of ways by the library staff, including the ability to employ information in an ethical and effective manner (statement 4). It is important to note that the need to develop information literacy skills is seen as relevant to students at all levels, and in some cases it could also benefit faculty who are "information-illiterate," thus pointing to the need for far-reaching information literacy provision. Some interesting second-choice clusters also emerge around statements 6 and 7. Selection of statement 6 indicates that information literacy is associated with the more familiar term *information skills*, suggesting that these two terms are used interchangeably. Selection of statement 7 illustrates a reluctance by some library staff to take on the role of facilitators of independent learning, pointing at the need for continuing professional

POSTER 3: STATEMENTS ILLUSTRATING FACULTY'S PERSPECTIVES OF INFORMATION LITERACY

1. A means of improving students' ability to cope with the independent learning element of a degree
2. Faculties do see it as important but haven't yet put the library in the centre of the frame. Hopefully the library is about to take the lead.
3. Faculty staff starting new courses are much more open to it than older faculty staff
4. An advantage/helper in learning but nowhere near as important as content.
5. Passing on facts, strategies of what to do or how to find information – how things work in the library, familiarity with IT, use of the Internet, library and electronic resources
6. Rote training sessions. They are yet to fully realise the role it plays in developing a rounded education for students and provide them with skills that go beyond University
7. A way of keeping students from using Google alone, a "filler up in the curriculum"
8. A new fancy idea which leads to another chunk out of their timetable??
9. I really have no idea how the faculties see information literacy

development (CPD) in this area. The issue of CPD for library staff was also raised at an Information Literacy Community of Practice event organized by the Library and Information Management Employability Skills (LIMES)⁴ project, held at Birmingham Central Library in November, 2006. Here the participants acknowledged that library staff needed training in general teaching practices and pedagogical strategies to enhance their support of learners (or users). In addition, by assuming the role of information literacy educators, librarians would elevate their professional status to the level of their faculty counterparts (Stubblings & Franklin, 2006), although this also raises the problem of professional territoriality that often hinders collaboration between library and faculty staff:

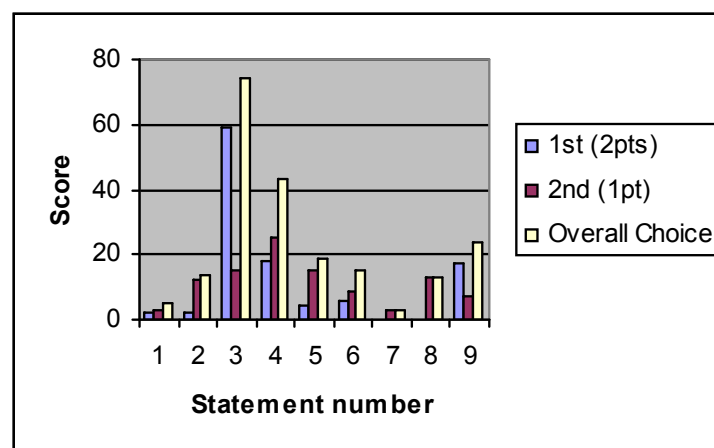
One cannot help but think that as librarians become pro-active advocates of information literacy, and reclaim the role of educator, faculty staff must perceive this development as an encroachment on their professional territory, and therefore resist such a change. (Andretta, 2006)

Statement 5 is the most popular first choice in poster 3. This has a number of implications. First, it illustrates that information literacy is perceived by faculty in terms of developing competencies in information systems and various types of sources, thus reinforcing the interpretation of information literacy as a set of

skills. Second, this view complements the perception of information literacy by library staff who see this phenomenon in terms of information retrieval and use associated with the more traditional aspect of information service. Third, this perspective also fits in with the institutional view of information literacy, which emphasizes the development of a set of competencies. Further reflections by the participants of the November workshop reveal conflicting takes on the findings of this poster. On one hand, statement 5 (the processing of information) is seen as a necessary step to achieving statement 1 (the accomplishment of independent learning); on the other hand, participants interpreted this selection in a negative way, suggesting that faculty have not yet caught up with the shift from library induction to information literacy.

Statement 3 presents the assumption that new staff have a more positive attitude than old staff, in order to test whether the participants perceived a correlation between this and length of tenure. However, it should be stressed that this view does not necessarily reflect the overall practice among teaching staff in higher education, and Mason (2004) warns us that there is frequent incongruence between tutors' articulated rationale for particular actions (theory-in-action) and their underpinning theories. The difference between explicit and implicit approaches to teaching (and the possibility that tutors can hold multiple and

CHART 4: STUDENTS' PERSPECTIVES OF INFORMATION LITERACY



POSTER 4: STATEMENTS ILLUSTRATING STUDENTS' PERSPECTIVES OF INFORMATION LITERACY

1. A necessary competence when they realise that it helps them become independent learners
2. As enhancing their research for essays/exams/theses
3. How to use the library, or a particular database, or find answers for a particular project or essay when they need it (i.e. now)
4. An imposition initially, only when engaged through an information literacy training course do they begin to see that there's more to it than a simple Google search
5. As an extension of IT skills and being able to use the web more effectively
6. When it is assessed they see it as a means of getting more marks. When it is formative it is seen as non-compulsory and therefore students don't take it seriously
7. They think of information literacy purely as applicable in the academic world, not as being relevant to the real world
8. A waste of time. Students think they know everything just because they are ICT literate
9. Many students are unaware of information literacy

contrasting viewpoints at the same time) is regarded "as a significant contributory factor in the responses adopted or achieved by learners" (Mason, 2004). Therefore, while new staff may very well be willing to start new courses, their approach to teaching may be traditional, and therefore not associated with innovative strategies such as problem-based learning.

Other challenges are exemplified by the selection of statements 7 and 9. In statement 7, the faculty's view of information literacy illustrates that it is used as a way of filling up the curriculum, while statement 9 demonstrates a lack of awareness of information literacy, indicating the need to establish a constructive dialogue between library staff and faculty. This view is confirmed by comments from the November event, where participants pointed out that a great deal of work is needed with respect to selling information literacy to faculty if it is to move beyond the standalone library induction approach. The issue of marketing was also raised at the LIME meeting, to address the widely acknowledged problem of misinformation.

The second part of this paper offers an example of integrating information literacy into the institutional learning and teaching policy. This addresses the problem by moving away from a reactive information and library service,

embodied by a standalone library induction approach, toward a proactive information literacy facilitation that calls for a full integration of information literacy in the learning and teaching policy and in curriculum delivery.

Statement 3 is the dominant first choice in poster 4. This suggests the students' interpretation of information literacy as assessment-driven information use: looking for answers at the point of need (when an assignment is due). Comments by the November participants reiterate this point by associating the students' attitudes toward information literacy with an instrumentalist and pragmatic approach, characterized by the need to know within the settings of one-off and just-in-time strategies. Walton, Barker, Hepworth, and Stephens (2007), in their study on fostering collaborative online and reflective learning using Blackboard as a Virtual Learning Environment, clearly demonstrate that students are far more positive and engaged in what they are learning when they can see a clear and transparent link between learning opportunities and the ways that the aspects of information literacy they are taught help them enhance their academic performance. For example, by learning how to evaluate Web pages systematically, students are able to discern relevant and authoritative Web pages they can use as reliable evidence. It follows that they

produce better work that subsequently earns a better mark.

Also, as expected, some clusters of first and second choices are found around statements 5 and 8, where information literacy is contextualized entirely within Web or ICT environments and offers students an opportunity to expand their Web searching competencies (statement 5), or is dismissed as a waste of time because students consider themselves competent in this area (statement 8). It is only through active engagement with information literacy that students stop seeing this as an imposition and develop an appreciation for the complex interaction with information (statement 4), suggesting that the onus of making the students realize the relevance of information literacy rests entirely on the educators. Another concern is reflected by the selection of statement 9 as a first choice, indicating that some students are unaware of information literacy altogether, or that they are unfamiliar with the term, but possess some of the competencies associated with it. Similarly to the findings depicting the faculty staff's view, the data here shows a great deal of misconception about information literacy and what it can offer, emphasizing the need for a more proactive marketing strategy to reach faculty and students alike.

REFLECTION ON THE GENERAL ISSUES RAISED BY THE FOUR POSTERS

At a national level there is a need to market different aspects of information literacy in order to expand its delivery beyond the content and competency frames and adopt a wider combination of information literacy approaches. As suggested by the participants of the November event, this might also address the mismatch between the institutional vision and the cultural practice at ground level.

At the institutional level, the data also shows that there is an urgent need to establish a more proactive dialogue between librarians, faculty, and students to address the lack of institutional "joined up thinking," minimize the impact of a prescribed curriculum, and ultimately, promote

information literacy education as the foundation of independent and lifelong learning. In line with the strategy adopted by Stubbings and Franklin (2006), the participants at the November event called for an integration of information literacy through policies on employability, although some queried whether this would ensure active engagement by the students or whether it might lead them to feel that information literacy is a burdensome add-on.

The second part of this paper examines the integration strategy adopted by Staffordshire University in response to the concerns raised. In particular, it shows how the university has ensured the integration of information literacy by embedding it within its Learning, Teaching and Assessment policy and by emphasizing its pedagogical and financial benefits. For example, in the business school, senior staff have begun to recognize that competence in information literacy enhances the employability of their students, and acknowledge that fully integrating information literacy within the curriculum gives their courses a unique selling point.

PART TWO: INTEGRATING INFORMATION LITERACY IN THE LEARNING AND TEACHING POLICY AT STAFFORDSHIRE UNIVERSITY

In its Higher Education Competency Standards, the American Association of College and Research Libraries (ACRL) defined information literacy as "An intellectual framework for understanding, finding, evaluating, and using information—activities which may be accomplished in part by fluency with information technology, in part by sound investigative methods, but most important, through critical discernment and reasoning." (ACRL, 2000)

Moreover, according to ACRL, an information-literate person must be "able to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information." (ACRL, 2000)

Definitions of information literacy abound

(Society of College, National & University Libraries, 1999; Big Blue Project, 2002; Armstrong, Abell, Boden, Town, Webber, & Woolley, 2005), but whichever description is used, it seems that information literacy is widely regarded as the key to becoming a successful independent learner (Bruce, 1995; Bundy, 2004). Writers in the business field, such as Lloyd (2003), regard information literacy as an essential set of competencies for the knowledge economy. This idea of successful independent learning overlaps with the UK government's educational policy, and also with the definition of gradueness promoted by the Quality Assurance Agency (QAA), although the language used here still emphasizes the importance of skills. Two quotations may help to set the context. The first is taken from the government white paper *The Future of Higher Education*, which states: "As well as improving vocational skills, we need to ensure that all graduates, including those who study traditional academic disciplines, have the right skills to equip them for a lifetime in a fast changing work environment." (Department for Education and Skills, 2003)

The second comes from the QAA's Web site *Understanding qualifications: the frameworks for higher education qualifications*, which describes honors-level degrees as follows:

Honours level

Graduates with a bachelor's degree with honours will have developed an understanding of a complex body of knowledge, some of it at the current boundaries of an academic discipline. Through this, the graduate will have developed analytical techniques and problem-solving skills that can be applied in many types of employment. The graduate will be able to evaluate evidence, arguments and assumptions, to reach sound judgements, and to communicate effectively. An honours graduate should have the qualities needed for employment in situations requiring the exercise of personal responsibility, and decision-making in

complex and unpredictable circumstances. (Quality Assurance Agency for Higher Education, n.d.)

Mindful of these depictions of the political and executive contexts facing higher education institutions, can librarians seize the initiative and take a strategic approach to information literacy, in order to ensure that it becomes an embedded part of the students' curriculum? Does the wider impact of the Leitch Review (HM Treasury, 2006) with its focus on the need for a highly skilled workforce (trained and in place by 2020) mean that higher education institutions need to make a coherent response by reviewing their strategies on students' acquisition of skills? And most importantly, can information professionals promote information literacy to shape the institutional strategic responses to this core strand of the government's educational policy?

In her keynote speech *Strategic Issues in information Literacy Development* at the University of Staffordshire's conference, Sheila Corral (2006) raised the idea of positioning information literacy in relation to the core business of a university—namely, education, research and enterprise. At Staffordshire University, a Learning and Teaching Fellowship⁵ project run by Alison Pope, one of the authors of this paper, is highlighting the need for a properly articulated information literacy policy that resonates with the institution's strategic goals. The aims of the information literacy project are very practical and seek to:

- (a) Create an agreed information literacy policy
- (b) Ensure cross-faculty awareness
- (c) Foster commitment to embedding information literacy within the curriculum

The project has been influenced by the work of Webber and Johnston (2006) and the criteria they use to describe an Information Literate University (ILU). Webber and Johnston define three stages in the development of an ILU:

embryonic, intermediate, and a stage they call “Towards the Information Literate University,” or a developed stage. Within the ILU, they identify five influential factors: the students; the management; the academics; the librarians; and the approach to learning, teaching and assessment. In developing the fellowship project at Staffordshire, it has been necessary to ensure that information literacy and any policy advocating it should:

- Become part of the university’s strategic and management landscape
- Support academic and information professionals in a partnership approach to information literacy
- Develop the students’ learning experience

As of summer 2006, the need to develop and implement an Information Literacy policy is now included in the university’s new Learning, Teaching and Assessment Strategy. Meetings with faculty representatives have resulted in the creation of the Statement of Good Practice, an adjunct to the university’s Learning, Teaching and Assessment Strategy. In January 2007, this statement was received by the university’s executive and approved by academics and information professionals. The business school has volunteered to test the proposed integrated approach to information literacy education.

INTEGRATING INFORMATION LITERACY INTO THE STRATEGIC LANDSCAPE

Becoming part of the university’s managerial landscape has been possibly the most challenging aspect of the fellowship project. The external imperative influencing this project in the context of the UK political agenda was mentioned earlier. An additional concern was whether it would be possible to raise the profile of information literacy education through existing provision, and at the same time ensure its seamless integration with the university’s strategic agenda, which consists of:

- Widening participation
- An emphasis on student progression

and retention

- A clear approach to quality and benchmarking issues
- E-learning
- The employability and skill level of graduates

A paper presented at the university’s Learning and Teaching Enhancement Committee meeting in Autumn 2005 provided a rationale for fitting information literacy into these strategic goals. Subsequently, approval was given for the establishment of a subgroup of senior faculty to work in tandem with the Learning and Teaching Fellow responsible for the project. A series of meetings examined the various policies, and resulted in a draft of the paper. A faculty representative suggested that one way to place information literacy at the heart of the university’s strategic agenda would be to include it in the student award handbooks. As a result, information literacy has become part of the award validation and revalidation process, and is therefore given a crucially high profile within the processes of academic review and quality assurance. This was a major step forward, and it was encouraging to see that such a positive suggestion originated from an academic colleague.

These subgroup meetings ran parallel to the university’s process of rewriting its Learning, Teaching and Assessment Strategy for 2006–2009. A particularly positive development came from the information services department, which suggested a redrafting of the document to include a specific reference to information literacy and the need for a policy to be developed. The Learning, Teaching and Assessment Strategy identifies key themes and objectives and, most importantly, section 2, “Supporting student learning and success,” directly calls for an information literacy policy:

2.4.3. “To develop and implement an Information Literacy policy that will enable SU students to develop the skills of independent information searching, evaluation and utilisation using all available sources of information and

appropriate.” (Staffordshire University, 2006)

Webber and Johnston (2006) argue that a developed ILU should have information literacy featured within the university's learning and teaching strategy and in other strategic documents. Therefore, it was seen as a major achievement that the sentence was included in the university's Learning, Teaching and Assessment Strategy.

PARTNERSHIP BETWEEN LIBRARY AND FACULTY

Webber and Johnston (2006) also claim that a developed ILU should have senior staff who have a clear understanding of what information literacy is. This echoes the notion put forward by the Australian and New Zealand Instituted for Information Literacy (ANZIIL) framework (Bundy, 2004): that effective information literacy delivery is best achieved when librarians, academic staff, and administrators work together in such a way that collaboration is “not viewed as unusual but rather is valued and regarded as the norm” (Peacock, 2004). The Learning and Teaching Enhancement information literacy subgroup at Staffordshire University is certainly evidence of this. Following from this group's activity and enthusiasm in drafting an information literacy policy, staff from the Information Services Department have set up a Community of Practice that focuses on information literacy and its role in enriching the learning experience. Staffordshire University's Information Literacy Community of Practice (SUILCoP) has already held four meetings⁶ that have been well attended by internal and external academics as well as information professionals. Further seminars are planned for 2007–2009.

One of the major thrusts of the information literacy Statement of Good Practice at Staffordshire is the need for a partnership between academics and information professionals. Again, this is something that Webber and Johnston (2006) see as crucial in the developed ILU. The policy developed at

Staffordshire University goes further by stressing that faculty directors for teaching and learning should become champions of information literacy, and actively promote collaboration between faculty and library staff. Moreover, in line with Webber and Johnston (2006), the statement indicates that an awareness of the university's position on information literacy should be part of new lecturers' induction process, and also part of any faculty's continuing professional development.

ENRICHING THE STUDENTS' LEARNING EXPERIENCE

Patricia Breivik, in her book *Student Learning in the Information Age* (1997), estimates that the sum of human knowledge will double every 73 days by 2020. A 21-year-old student leaving Staffordshire University in 2007 will be just 34 at that time. He or she might be just beginning to move up the career ladder, drawing on all the competencies and knowledge acquired during his or her studies. The impact of the Leitch Review (HM Treasury, 2006), with its focus on creating a highly skilled and competitive workforce by 2020, and the UK government's response to this (Department for Innovation, Universities and Skills, 2007) also underlines how important it is to ensure that higher education develop a dovetailed and context-specific approach to information literacy.

Consequently, in order to support as many different learners and modes of study as possible, Staffordshire University's policy seeks to emphasize the need for approaches to information literacy to be embedded and subject-specific. An integrated framework approach using “hot topics” and reflective learning was successfully tested and used by Bordinaro and Richardson (2004). The policy also stresses that the inclusion of information literacy should be iterative and incremental, using a “just in time” approach where possible. The importance of timeliness of integrated information literacy sessions is confirmed by the work of Walker and Engel (2003), who also support a “just in time” strategy. In addition, all learning styles should be considered, while the

delivery and contact time provision should remain flexible. Above all, as articulated by Webber and Johnston (2006), information literacy should be regarded as a graduate attribute, and should be assessed by credit-bearing work. The necessity for assessment in information literacy is outlined by Walton (2005), and different approaches to assessment are discussed by Andretta (2005), making it clear that a link to formative and summative assessments can cement students' experience of information literacy and enhance the relevance of such a learning experience.

It was felt that information literacy support tools needed to be available in different formats to facilitate both face-to-face delivery and e-learning in whole group or individual scenarios. While the policy was in the process of development, the Information Services Information Literacy Project Working Group was tailoring a piece of open-source software from the University of Minnesota and turning it into a Web-based product, the Assignment Survival Kit (ASK).⁷ This tool is still in development, but it is an indicator of one of the directions in which the working group wishes to proceed.

FUTURE STRATEGIES TO ENSURE IL INTEGRATION AT STAFFORDSHIRE UNIVERSITY

From the perspective of the fellowship project, a number of targets need to be accomplished. Having achieved approval at executive level:

- (a) The approved statement needs to be embedded within faculties.
- (b) The dynamic of the Learning and Teaching Enhancement Committee subgroup needs to be maintained via the SUILCoP. Collaboration between library and faculty staff to enrich learning and integrate information literacy in the curricula should be promoted. This necessarily involves the examination of materials that are currently on offer to decide what other resources

are needed.

- (c) The success of the project must be evaluated.

One of the most exciting developments is the embedding of information literacy within the faculties and schools. The dean of the business school has volunteered his department to test drive the information literacy strategy.⁸ The researcher responsible for the project has already begun to work in close partnership with senior staff within the business school to move the policy beyond the "strategic landscape" and into the realm of everyday curricular practice. At the dean's suggestion, this is being done using the university's processes of validation and revalidation as the vehicles driving the change. This work is expected to create a framework that will enable the integration of information literacy in other disciplines.

In order to contextualize this process of integration, it is necessary to explain the way Staffordshire University's award structure operates. The aim of Staffordshire University's Award Outcomes document was to develop a common structure of a number of Staffordshire University learning outcome statements to aid the writing of the learning outcomes for all the awards. The eight learning outcomes are summarized as:

1. Knowledge and Understanding
2. Learning
3. Enquiry
4. Analysis
5. Problem Solving
6. Communication
7. Application
8. Reflection

Each learning outcome has been developed into an outcome statement at certificate, intermediate, honours, master's, and doctorate level, and these have also been mapped against the framework for higher education qualifications in England, Wales and Northern Ireland. Looking at these outcomes, it seemed that the most likely home for information literacy would be enquiry, although thanks to

TABLE 1: LEVELS OF OUTCOME AND ENQUIRY

Outcome	Certificate	Intermediate	Honours
Enquiry	Present, evaluate, and interpret qualitative and quantitative data	Demonstrate knowledge of the main methods of enquiry in (<i>the field of study</i>)	Deploy accurately established techniques of analysis and enquiry and initiate and carry out projects within (<i>the field of study</i>)

the multifaceted nature of information literacy one could make a case for integrating aspects of this phenomenon in all of these outcomes. The table below (Table 1) sets out what enquiry involves at certificate, intermediate and honours level (Also known as levels 1, 2 and 3 of an undergraduate degree).

There was concern over whether the integration of information literacy within the enquiry learning outcome would restrict its overall impact on the students' learning experience, although at the same time it was recognized that such a positioning would emphasize its practical application to investigative and problem-solving activities, which can be fully integrated in summative and formative assessment strategies.

Nesting information literacy within this learning outcome means that it will have to be addressed explicitly in all validations and revalidations within the university. It also shows clear commitment to the implementation of the information literacy policy at university level through a top-down approach. The benefits to the individual learner are immense; it is anticipated that prospective students will perceive information literacy as a useful addition to their employability and an enriching enhancement of their learning experience, as argued by Bruce (1995) and Bundy (2004). As mentioned earlier, senior academics within the business school certainly see information literacy as helping to address the major issues of retention, recruitment and employability, while at the same time providing a competitive edge in the way their courses are marketed.

CONCLUSION

The data examined here offers a picture of the state of information literacy education in the UK and points to a number of concerns that might be relevant to other information literacy educators operating in other countries. The most striking feature is the interpretation of information literacy as information skills and knowledge of the information environment, based on the rationale that these two approaches provide easy-to-measure learning outcomes. These findings point to the need to promote alternative pedagogical strategies that emphasize independent learning or present information literacy as a social enabler. At a professional level, the preference for statement 5 in poster 3 (*Passing on facts, strategies of what to do or how to find information – how things work in the library, familiarity with IT, use of the Internet, library and electronic resources*) clearly illustrates that faculty staff see information literacy, and by implication the librarians' provision of this, in terms of traditional information service. This is complemented by the predominant view promoted by statement 2 in poster 2 (*An awareness of the need for information, how to find it, evaluate it for relevance, use it appropriately and add to the pool of information available to others*) where information literacy is defined as information provision and where users (students and faculty) are in need of information literacy training. It is clear that in response to these challenges, librarians should expand their professional profile to become more proactive educators and information brokers. This view is confirmed by the participants at the LIMES meeting, who claim that the spirit of collaboration between library and faculty can only be established when the inequality of the relationship between these

two professional groups is tackled, and when the librarians' role as educators is widely acknowledged. Training is clearly needed to equip librarians with the pedagogical awareness required to enhance students' learning and collaborate effectively with faculty. In addition to assuming the role of educator, librarians must also be prepared to engage with the strategic environment of the institutions in which they work. To demonstrate the value of that role, they need to advocate information literacy in a way that can be understood by the academic community they are engaged with, and actively promote institutional long-term objectives.

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REFERENCES

- Andretta, S. (2005). *Information literacy: a practitioner's guide*. Oxford: Chandos Publishing.
- Andretta, S. (2006). Information literacy: challenges of implementation, *ITALICS*, 5(1). Retrieved August 1, 2007, from http://www.ics.heacademy.ac.uk/italics/vol5-1/pdf/SAeditorial_final06Jan.pdf
- Andretta, S. (2007). Information literacy: the functional literacy for the 21st century. In Andretta, S. (Ed.), *Change and challenge: Information literacy for the 21st century* (pp. 1–14). Adelaide: Auslib Press.
- Andretta, S. (in press). Facilitating Information Literacy Education (FILE). In Brine, A. (Ed.), *Handbook of library training practice and development*, Vol. 3. Gower Publishing Ltd.
- Armstrong, C., Abell, A., Boden, D., Town, S., Webber, S., & Woolley, M. (2005). Defining information literacy for the UK. *Update*. 4(1-2), 23–25.
- Association of College and Research Libraries. (2000, January 18). *Information literacy competency standards for higher education*. Retrieved November 17, 2007, from <http://www.ala.org/ala/acrl/acrlstandards/informationliteracycompetency.htm>
- Breivik, P. S. (1997). *Student learning in the information age*. Phoenix: American Council on Education/Oryx Press Series on Higher Education.
- Big Blue Project. (2002). *The Big Blue: Information skills for students: Final report*. Retrieved July 31, 2002, from <http://www.leeds.ac.uk/bigblue/finalreport.html>
- Bordinaro, K., & Richardson, G. (2004). Scaffolding and reflection in course-integrated library instruction. *Journal of Academic Librarianship*. 30(5), 391–401.
- Bruce, C. S. (1995). Information literacy: a framework for higher education. *Australian Library Journal*. 44(3), 158–170.
- Bruce, C., Edwards, S. L., & Lupton, M. (2006). Six frames for information literacy education: a conceptual framework for interpreting the relationships between theory and practice. *ITALICS*, 5(1), January 2006. Retrieved November 17, 2007, from http://www.ics.heacademy.ac.uk/italics/pdf/sixframes_final%201.pdf
- Bundy, A. (Ed.). (2004). *Australian and New Zealand Information Literacy (ANZIIL) framework: Principles, standards and practice*. Adelaide: Australian and New Zealand Institute for Information Literacy. Retrieved February 8, 2005, from <http://www.anziil.org/resources/Info%20lit%202nd%20edition.pdf>
- Corrall, S. (2006) Strategic issues in information literacy development. Paper presented at the

Information literacy: Recognising the need conference, Staffordshire University, Stoke on Trent. Retrieved November 19, 2007, from http://www.staffs.ac.uk/infolitconf/sheila_corrall/s_corrall.pdf

Department for Education and Skills (DfES). (2003). *The Future of higher education*. Retrieved November 19, 2007, from <http://www.dfes.gov.uk/hegateway/strategy/hestrategy/pdfs/DfES-HigherEducation.pdf>

HM Treasury. (2006). *Leitch Review*. Retrieved November 19, 2007, from http://www.hm-treasury.gov.uk/independent_reviews/leitch_review/review_leitch_index.cfm

HM Government, Department for Innovation, Universities and Skills. (2007). *World class skills: implementing the Leitch Review of skills in England*. Retrieved November 19, 2007, from <http://www.dfes.gov.uk/skillsstrategy/uploads/documents/World%20Class%20skills%20FINAL.pdf>

Lloyd, A. (2003). Information literacy: the meta-competency of the knowledge economy? An exploratory paper. *Journal of Librarianship and Information Science*, 35(2), 87–92.

Lorenzo, G., & Dziuban, C. (2006). Ensuring the net generation is net savvy. *Eli Paper (Educause Learning Initiative)*, (2). Retrieved November 17, 2007, from <http://www.educause.edu/ir/library/pdf/ELI3006.pdf>

Mason, R. (2004). *JISC e-learning models desk study: Stage 1: Pratt's five perspectives on effective practice* (Issue 1). Retrieved July 30, 2007, from [http://www.essex.ac.uk/chimera/projects/JISC/Stage%201%20Pratts%20Classification%20Framework%20\(Versio%201\).pdf](http://www.essex.ac.uk/chimera/projects/JISC/Stage%201%20Pratts%20Classification%20Framework%20(Versio%201).pdf)

Peacock, J. (2004). Standards, curriculum and learning: Implications for professional development. In Bundy, A. (Ed.), *Australian and New Zealand Information Literacy Framework: principles, standards and practice* (pp. 29–33). Adelaide: Australian and New

Zealand Institute for Information Literacy. Retrieved February 8, 2005, from <http://www.anziil.org/resources/Info%20lit%202nd%20edition.pdf>

Quality Assurance Agency for Higher Education (QAA) (n.d.) *Understanding qualifications: the frameworks for higher education qualifications*. Retrieved August 17, 2005, from <http://www.qaa.ac.uk/students/guides/UnderstandQuals.asp>

Society of College, National & University Libraries (SCONUL) Advisory Committee on Information Literacy. (1999). *Information Skills in Higher Education: A SCONUL Position Paper*. Retrieved November 17, 2007, from http://www.sconul.ac.uk/groups/information_literacy/papers/Seven_pillars2.pdf

Staffordshire University. (2006). *Staffordshire University learning, teaching and assessment strategy 2006–9*. Unpublished internal document.

Stubbings, R., & Franklin, G. (2006). Does advocacy help to embed information literacy into the curriculum? *ITALICS*, 5(1). Retrieved November 17, 2007, from <http://www.ics.heacademy.ac.uk/italics/vol5iss1.htm>

Walker, H.M., & Engel, K. R. (2003). Research exercise: a sequenced approach to just-in-time information literacy instruction. *Research Strategies*, 19, 135–147.

Walton, G. (2005). Assessing students is essential for success. *Update*, 4(1–2), 36–37.

Walton, G., Barker, J., Hepworth, M., & Stephens, D. (2007). Facilitating information literacy teaching and learning in a Level 1 sport and exercise module by means of collaborative online and reflective learning. In Andretta, S. (Ed.) *Change and challenge: information literacy for the 21st Century*. Adelaide: Auslib Press.

Webber, S., & Johnston, B. (2006) Working towards the information literate university. In

Walton, G., & Pope, A. (Eds.) *Information literacy: recognising the need* (pp. 47–58). Oxford: Chandos Publishing.

Whitworth, A. (2006). Communicative competence in the information age: Towards a critical theory of information literacy education. *ITALICS*, 5(1). Retrieved November 17, 2007, from <http://www.ics.heacademy.ac.uk/italics/vol5iss1.htm>

NOTES

1. Retrieved August 1, 2007, from <http://www.staffs.ac.uk/infolitconf/>.
2. HEFCE, or the Higher Education Funding Council for England, distributes public money to universities and colleges in England that provide higher education. Retrieved August 2, 2007, from <http://www.hefce.ac.uk/aboutus/history/>.
3. Many thanks to Kerry Weller and Ahmad Khudair for their comments on this.
4. Retrieved August 1, 2007, from <http://www.ics.heacademy.ac.uk/limes/CONTENT/cop.htm>.
5. To give some background, the Learning and Teaching Fellowships are awarded to Staffordshire University staff who wish to research a particular area of the current learning and teaching agenda. The fellowships allow successful candidates a two-year period to focus on a specific aspect of their research interests and to complete a project that must offer tangible benefits to the university.
6. *Information literacy: recognising the need*. Retrieved August 1, 2007, from <http://www.staffs.ac.uk/infolitconf/events/index.php>.
7. Retrieved January 10, 2007 from <http://www.staffs.ac.uk/ask/>.
8. Alison Pope is indebted to Miceál Barden, former dean of the business school, Staffordshire University, for his contribution to this section.